

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-10. (Canceled)

11. (Currently Amended) A method comprising:

determining, by a computing system, whether a workload executed or being executed by a platform resembles a reference workload, based at least in part on one or more performance events observed from monitoring the platform's execution of the workload; and

~~if in response to determining that the workload is determined to resemble the~~
reference workload, performing, by the computing system, a selected one of
selecting, by the computing system, a set of one or more configuration
parameter values pre-selected for the platform to execute the resembled
reference workload and configuring the computing system using the set of
one or more configuration parameter values, and
providing, by the computing system, information about the determined
resembled reference workload to facilitate the selection of the set of one
or more configuration parameter values pre-selected for the platform to
execute the determined resembled reference workload.

12. (Original) The method of claim 11, wherein the one or more reference workloads comprise at least a selected one of a route look-up workload, a OSPF workload, a JPEG codec workload, a 3DES encryption/decryption workload, an AES encryption/decryption workload, an IP packet forwarding workload, a H.323 speech codec workload.

13. (Original) The method of claim 11, wherein said determining comprises determining a correlation metric between the workload and the reference workload, based on the one or more performance events observed during said monitoring, and observed during at least one prior execution of the reference workload; and
determining whether the correlation metric exceeds a correlation threshold.
14. (Original) The method of claim 11, wherein the method further comprises performing a selected one of
receiving the one or more performance events observed during said monitoring;
and
said monitoring.
15. (Original) The method of claim 11, wherein
the system comprises the platform; and
the method further comprises executing the workload, and performing said monitoring.
16. (Original) The method of claim 11, wherein
said performing comprises selecting a set of one or more configuration parameter values pre-selected for the platform to execute the determined resembled reference workload; and
the method further comprises performing a selected one of
applying the selected set of one or more configuration parameter values to configure the platform, and
providing information about the selected set of one or more configuration parameter values to facilitate application of the selected set of one or more configuration parameter values to configure the platform.

17. (Previously Presented) A method comprising:
generating, by a computing system, a lookup index to one or more pre-established sets of configuration parameter values, based at least in part on an output of an index function configured to accept as input one or more measured performance values associated with one or more corresponding observed performance events associated with a platform's execution of a workload; and
selecting, by the computing system, one of the one or more pre-established sets of configuration parameter values, based at least in part on the generated lookup index, for application to configure the platform.
18. (Canceled)
19. (Original) The method of claim 17, wherein the method further comprises performing a selected one of
receiving the one or more performance events observed; and
monitoring said execution of the workload by the platform.
20. (Original) The method of claim 17, wherein the method further comprises performing a selected one of
providing information about the selected set of one or more configuration parameter values to facilitate application of the selected set of one or more configuration parameter values to configure the platform; and
applying the selected set of one or more configuration parameter values to configure the platform, the platform being a part of the system.
21. (Currently Amended) An apparatus comprising
storage medium having stored therein programming instructions designed to enable the apparatus to
determine whether a workload executed or being executed by a platform sufficiently resembles a reference workload, the workload comprising a plurality of performance events observed from monitoring the

platform's execution of the workload, and the reference workload comprising a plurality of reference performance events collectively characterizing a signature computational task, and
upon determining that the workload sufficiently resembles the reference workload, perform at least a selected one of
selecting a set of one or more configuration parameter values pre-selected for the platform to execute the determined resembled reference workload and reconfiguring the platform using the set of one or more configuration parameter values, and
providing information about the determined resembled reference workload to facilitate the selection of the set of one or more configuration parameter values pre-selected for the platform to execute the determined resembled reference workload; and
at least one processor coupled to the storage medium to execute the programming instructions.

22. (Original) The apparatus of claim 21, wherein said programming instructions are designed to enable the apparatus to perform said determine by
determining a plurality of correlation metrics between the workload and the reference workload, based on the plurality of performance events observed during said monitoring, observed during at least one prior execution of the reference workload; and
determining whether at least one of determined correlation metrics exceeds a correlation threshold.

23. (Original) The apparatus of claim 21, wherein the programming instructions are further designed to perform a selected one of
receiving the plurality of performance events observed during said monitoring;
monitoring the execution of the workload to observe the plurality of performance events;

providing information about the selected set of one or more configuration parameter values to facilitate application of the selected set of one or more configuration parameter values to configure the platform; and

applying the selected set of one or more configuration parameter values to configure the platform.

24. (Previously Presented) An apparatus comprising:

a storage medium having stored therein programming instructions designed to enable the apparatus to

generate a lookup index to one or more pre-established sets of configuration parameter values, based at least in part on an output of an index function configured to accept as input one or more measured performance values associated with one or more corresponding observed performance events associated with a platform's execution of a workload; and

select one of the one or more pre-established sets of configuration parameter values, based at least in part on the generated lookup index, for application to configure the platform; and

at least a processor coupled to the storage medium to execute the programming instructions.

25. (Canceled)

26. (Previously Presented) The apparatus of claim 24, wherein the programming instructions are further designed to enable the apparatus to perform a selected one of receiving the one or more performance events observed; monitoring said execution of the workload by the platform; providing information about the selected set of one or more configuration parameter values to facilitate application of the selected set of one or more configuration parameter values to configure the platform; and applying the selected set of one or more configuration parameter values to configure the platform, the platform being a part of the system.

27. (Previously Presented) A system comprising:
a platform to execute a workload comprising a plurality of performance events;
a monitor, either coupled to or an integral part of the platform, to observe the plurality of performance events of the workload; and
an analyzer coupled to the monitor to receive the plurality of performance events observed, and in response, at least contribute to selecting if possible, a set of one or more configuration parameters values for application to configure the platform, based at least in part on the plurality of performance events observed,
wherein the analyzer is adapted to at least contribute by determining whether the workload resembles one of one or more reference workloads, the resembled reference workload having a plurality of reference performance events collectively characterizing a particular computational task.

28. (Canceled)

29. (Previously Presented) The system of claim 27, wherein the analyzer is adapted to at least contribute by generating a lookup index to one or more sets of configuration parameter values, to facilitate said selection of one of the one or more configuration parameter values, based at least in part on the received plurality of performance events observed.

30. (Original) The system of claim 27, wherein
the platform comprises a first networking interface; and
the system further comprises a computing device hosting the analyzer, the computing device including a second networking interface to couple the computing device with the platform via a network connection.

31. (Previously Presented) An article of manufacture comprising:
a machine readable medium; and
a plurality of programming instructions on the machine readable medium,
designed to enable an apparatus to observe one or more performance events

associated with a platform's execution of a workload or receive the one or more performance events observed, and to at least contribute in selection of one or more configuration parameters values for application to configure the platform, based at least in part on the one or more performance events observed, wherein the at least contributing includes the platform

determining whether the workload resembles one of one or more reference workloads, based at least in part on the received one or more performance events observed, the resembled reference workload to be employed to facilitate said selection of one or more configuration parameter values; or

generating a lookup index to one or more pre-established sets of configuration parameter values based at least in part on the output of an index function configured to accept as input one or more measured performance values corresponding to the received observed one or more performance events, to facilitate said selection of one of the one or more pre-established sets of configuration parameter values.

32-33. (Canceled)

34. (Previously Presented) The method of claim 11, wherein said monitoring the platform's execution of the workload comprises monitoring at least a selected one of a processor performance counter, an OS performance counter, and a chipset performance counter, while the platform executes the workload.

35. (Previously Presented) The method of claim 11, wherein the plurality of configuration parameter values comprise one or more of processor configuration parameter values, OS configuration parameter values, and chipset configuration parameter values.

36. (Previously Presented) The method of claim 17, wherein said monitoring the platform's execution of the workload comprises monitoring at least a selected one of a processor performance counter, an OS performance counter, and a chipset performance counter, while the platform executes the workload.

37. (Previously Presented) The method of claim 17, wherein the one or more configuration parameter values comprise one or more of processor configuration parameter values, OS configuration parameter values, and chipset configuration parameter values.